Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.-12. (Cancelled)

13. (Previously presented) An *E.* coli host cell comprising a first expression cassette comprising a promoter and a nucleic acid sequence encoding isopentenyl diphosphate isomerase, geranylgeranyl diphosphate synthase, 1-deoxyxylulose 5-phosphate synthase, a phytoene synthase, or a phytoene desaturase the nucleic acid sequence being operably linked to the promoter which is bound by ntrC such that the promoter is regulated by acetyl phosphate in the absence of nitrogen starvation, wherein the cell is lacking a functional glnL histidine protein kinase gene.

14.-20. (Cancelled)

21. (Previously presented) The host cell of claim 13 wherein the host cell further comprises a nucleic acid sequence encoding a phosphoenolpyruvate synthase.

22. (Withdrawn) A method of producing lycopene, β-carotene, astaxanthin, or one of their precursors in a host cell, the method comprising:

providing the host cell of claim 12, wherein the enzyme is a biosynthetic enzyme that catalyzes synthesis of the lycopene, β-carotene, astaxanthin, or one of their precursors;

overexpressing a phosphoenolpyruvate synthase; and

expressing the biosynthetic enzymes that catalyze the synthesis of the lycopene, β-carotene, astaxanthin, or one of their precursors.

23. (Previously presented) A method of producing a lycopene in a bacterial host cell, the method comprising:

providing the host cell of claim 13; and

expressing a 1-deoxy-D-xylulose 5-phosphate synthase, a geranylgeranyl diphosphate synthase, a phytoene synthase, and a phytoene desaturase, at least one of which is expressed from the first expression cassette.

24. (Previously presented) A kit comprising (i) a nucleic acid sequence containing a promoter bound by ntrC such that the promoter is regulated by acetyl phosphate in a defined bacterial host cell, and a coding sequence that encodes; isopentenyl diphosphate isomerase, geranylgeranyl diphosphate synthase, 1-deoxyxylulose 5-phosphate synthase, a phytoene synthase, a phytoene desaturase, or a lycopene cyclase and (ii) the defined host cell which is an *E. coli* host cell genetically modified by deletion or inactivating mutation of the glnL gene.

25.-37. (Cancelled)

38. (Withdrawn) The host cell of claim 1 wherein the heterologous metabolite is a polyhydroxyalkanoate.

39.-44. (Cancelled)

45. (Previously presented) The kit of claim 24 wherein the promoter is the glnAp2 promoter.

46. (Cancelled)

47. (Currently amended) The method of claim 23 ~~in which the culturing comprises~~ further comprising culturing the host cell under nitrogen rich conditions.

48. (Previously presented) The method of claim 47 in which the culturing comprises growth to late logarithmic growth.

49. (Withdrawn) The method of claim 46 in which the culturing comprises growth to stationary phase.

50. (Currently amended) The method of claim 23 in which at least 5 mg L^{-1} of lycopene are produced.

51. (Cancelled)

52. (Withdrawn) The host cell of claim12 wherein the isoprenoid is lycopene.

53. (Withdrawn) The host cell of claim 12 wherein the isoprenoid is β-carotene.

54. (Withdrawn) The host cell of claim 12 wherein the isoprenoid is astaxanthin.

55. (Previously presented) The host cell of claim 13 wherein the enzyme is isopentenyl diphosphate isomerase.

56. (Previously presented) The host cell of claim 13 wherein the enzyme is geranylgeranyl diphosphate synthase.

57. (Previously presented) The host cell of claim 13 wherein the enzyme is 1-deoxyxylulose 5-phosphate synthase.

58. (Withdrawn) The method of claim 46 wherein the metabolite is a polyketide.

59. (Withdrawn) The method of claim 46 wherein the metabolite is a polyhydroxyalkanoate.

60. (Withdrawn) The method of claim 46 in which the promoter is *glnAp2*.

61. (Previously presented) The method of claim 47 in which the promoter is *glnAp2*.

62. (Previously presented) The method of claim 48 in which the promoter is *glnAp2*.

63. (Withdrawn) The method of claim 49 in which the promoter is *glnAp2*.

64. (Withdrawn) The method of claim 49 in which the metabolite is a carotenoid.

65. (Withdrawn) The method of claim 49 in which the metabolite is lycopene.

66. (Withdrawn) The method of claim 65 in which the culturing comprises nitrogen rich conditions.

67. (Withdrawn) The method of claim 65 in which the culturing comprises growth to late logarithmic growth.

68. (Withdrawn) The method of claim 65 in which the culturing comprises growth to stationary phase.

69. (Withdrawn) The method of claim 58 in which the culturing comprises nitrogen rich conditions.

70. (Withdrawn) The method of claim 58 in which the culturing comprises growth to late logarithmic growth.

71. (Withdrawn) The method of claim 58 in which the culturing comprises growth to stationary phase.

72. (Withdrawn) The method of claim 59 in which the culturing comprises nitrogen rich conditions.

73. (Withdrawn) The method of claim 59 in which the culturing comprises growth to late logarithmic growth.

74. (Withdrawn) The method of claim 59 in which the culturing comprises growth to stationary phase.

75. (Previously presented) The host cell of claim 13 wherein the promoter is *glnAp2*.